Neonatal Resuscitation

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Neonatal resuscitation refers to the series of interventions used to stimulate spontaneous respiratory effort. The typical newborn response to hypoxia is apnea and bradycardia.

Basic Life Support

1. Position the airway.
2. Suction the mouth and nasopharynx.
3. Dry and keep warm with thermal blanket or dry towel. Cover scalp with stocking cap.
4. Stimulate by drying vigorously including the head and back.
5. Clamp and cut the cord.
6. Evaluate respirations.
7. Assisted bag-valve-mask ventilation 40-60 breaths/minute with 100% oxygen if patient has apnea, severe respiratory depression, or heart rate < 100/min. Use blow by or mask with 100% oxygen for mild distress.
8. Check heart rate at umbilical cord stump, or brachial artery.

Advanced Life Support

HEART RATE

< 60/min	60-100/min	>100/min
1. Continued assisted ventilation. 2. Begin chest compression at a rate of 120 events/min. (i.e. 3:1 as 90 compressions and 30 breaths) 3. If no improvement after 30 seconds, perform tracheal intubation. 4. If no improvement, establish vascular access and give epinephrine (1:10,000) 0.01 mg/kg (0.1 ml/kg) IV or IO, or 0.03 mg/kg (0.3 ml/kg) ET. Repeat q 3-5 min. prn.	1. Continue assisted ventilation. 2. Reassess heart rate and respiration enroute. Perform tracheal intubation if no improvement.	1. Check skin color. If central cyanosis, give oxygen by mask or blow by. 2. Reassess heart rate and respirations enroute.

Key Points/Considerations

1. Use appropriate barrier precautions.
2. If thick or thin particulate meconium is present in the non vigorous infant with respiratory distress, perform direct tracheal suction, using appropriate suction adapter if available. Repeat tracheal suction until no meconium. May require formal tracheal intubation.
3. Perform chest compressions with two thumbs – encircling hands at the mid-sternum just below the intermammary line, at a depth of 1/3 of the A-P chest diameter.
4. Use appropriately-sized ET tubes and laryngoscope blades (see chart).
5. Confirmation of tracheal tube placement by exhaled CO_2 detection.

Service Director Initials _____

Medical Director Initials _____ Date Approved By KBEMS _____